A flannel shirt, made to fit pretty tightly and to cover the whole abdomen, should be worn for the first two years without intermission. If it be oppressively warm, it may be of a light kind for summer. This, with long woollen or worsted stockings, will constitute the most important article of dress, and will guard pretty effectually against sudden vicissitudes of temperature, whatever else may be worn.

ARTICLE VI. *Report of Cases Treated in the Baltimore Almshouse Hospital.* By SAMUEL ANNAN, M. D., Senior Physician to the Institution.

DYSENTERY. This disease did not entirely disappear until the beginning of winter. Since that time no new cases have been presented; and the obstinate diarrhœa which succeeded the acute attack, in a few instances, has either been cured, or the cases have terminated fatally. The plan of treatment mentioned in my former report, was attended by the happiest results, in all the cases which were seen early. The relief from the most distressing symptoms was immediate; and a perfect cure speedily followed. My subsequent experience, and the condition of the mucous membrane of the colon, as seen in several cases, on examination after death, have brought me to the conclusion, that this mode of treatment, which answers so admirably in the early stages, must be materially modified, or totally changed, in order to suit the more advanced periods of this painful and dangerous disease.

Dysentery is known to be an inflammation of the colon and rectum, occasionally extending a short distance into the small intestines. This inflammation, sooner or later, according to its greater or less degree of intensity, produces softening and ulceration of the mucous membrane, its primary seat. Sphacelus, denoted by blackness or lividity, and softness of this membrane, the muscular coat occasionally partaking of this softness, is a less frequent occurrence. Where the disease has existed for any length of time, extensive ulceration, with softening of those portions of the mucous membrane, not destroyed by the ulcers, is the common appearance. The extent to which this ulceration sometimes proceeds, before life is destroyed, is very surprising. I have seen the greatest part of the rectum and colon, almost one continued ulcer, portions of the lining membrane in a state of red fungous elevation, being interposed here and there; by which the ulcerated spaces were separated from each other.

From this statement of the morbid appearances, it is manifest, that when the disease has advanced so far, that disorganization of the mucous membrane has taken place, it is worse than folly to attempt to cure it by the administration of even the mildest cathartics. If softening and ulceration exist, the period has gone by, at which we might expect to afford relief, by gently stimulating the diseased membrane, in order to make it deplete itself, by augmenting its secretion, and thus remove the engorgement from its distended vessels. The vitality of these engorged vessels has, by this time, been impaired to that degree, that they cannot be excited to a secretory effort, the effect of which would be, a tendency towards a restoration to healthful action. Stimulation will now only increase the morbid action, and hasten, or extend the ulceration. Calomel and opium, and large doses of castor oil, are therefore inadmissible. Instead of allaying the irritation, diminishing the pain, and causing the patient to feel more comfortable; after the effect of the opium goes off, the symptoms will be aggravated; the soreness and tenderness of the abdomen, will be increased; the tormina and tenesmus rendered more harassing. This is the state of things, which has brought laxatives into disrepute. Their reiterated administration has only served to make the patient worse, and it has in consequence been inferred, that they are always injurious.

It is impossible to specify any particular time, at which the changes of the mucous membrane, of which I have spoken, take place. So much depends upon the violence of the disease, and the strength of the patient to resist. This general rule, however, may be laid down, viz, that the longer the time which has elapsed from the commencement of the attack, the greater is the risk from the exhibition of large doses of purgative medicine, and the greater the necessity for other modes of depletion, proportioned to the strength of the patient. It should also be remembered, that the case may not be seen, until the strength has been so much exhausted, that depletion of every kind, may be altogether inapplicable. Such cases will generally have a fatal termination. In a few instances, under careful management, they nevertheless recover. An intractable diarrhœa continues until the ulcers cicatrize, and the tender parts regain their healthful condition.

In the treatment of dysentery of several days standing; where the attack has been violent from the beginning, and the sufferings of the patient are great, blood letting, both general and local, is plainly indicated. We have a dangerous inflammation to manage, which is threatening disorganization of an important part of the organism; and our most powerful remedies should be employed, with an energy proportioned to the strength of the patient, and the character of the disease. Blood should be abstracted copiously from the arm, and cups or leeches, applied along the course of the colon, in the right and left iliac and lumbar regions, if it is thought the patient cannot well bear a repetition of the general bleeding. In robust persons local bleeding does little or no good, prior to the effectual subjugation of the vigorous action of the heart, by taking from the whole system. Where the patient will bear the loss of from twenty-four to thirty-two ounces of blood from the arm, local bleeding is not immediately necessary, and may be reserved for a subsequent period. The next inquiry is, what should follow the bleeding? If too long a time has not elapsed, I am satisfied, that a full dose of calomel and opium, followed by castor oil and Dover's powder, as formerly recommended, is preferable to all other remedies. But it will be asked, what is too long a time? I can only reply, that I have thus treated persons, who had been as ill as they apparently could well be, for seven or eight days, and nothing done during all this time, with the effect of immediate relief, and final recovery. In some cases, one bleeding was all that was required; in others, two were requisite, the second being prescribed, one, two, or three days after the first. Occasionally cups were employed after the first bleeding. As we cannot specify the precise period when free purging becomes inadmissible, I apprehend we may come pretty near the true state of the case, by attending to the following circumstances.

If the patient has been ill during two or three weeks and is greatly reduced, it is plain enough, that the time for active treatment has passed. If on the other hand, he has been ill but a few days, and still retains considerable strength, bleeding and purging should be tried, and if relief of some permanency is procured, we may be encouraged to persevere in the purging plan. But if there is a speedy and perpetual recurrence of the tormina and tenesmus, as soon as the effect of the opium disappears, and along with this, there is an increase of the soreness and tenderness of the abdomen, along the course of the colon, it is obvious our remedies are doing harm, and a different and milder course must be adopted. In this state of things, the proper remedies are emollient and anodyne injections, fomentations and blisters to the abdomen, an occasional warm bath, at the temperature of 100°, Dover's powder to allay irritation and determine to the surface, with small doses of castor oil combined with laudanum, to carry off the acrid contents of the bowels. The best effects not unfrequently follow the administration of one or two teaspoonfuls of castor oil, with twenty drops of laudanum, night and morning. If the tenesmus should now and then become more troublesome under this treatment, an ounce of the oil, with fifty drops of laudanum, will give ease, and the small doses may then be continued. Even where there was ulceration, as far as I could judge, my patients always felt relieved by two or three pretty free evacuations, by castor oil. It is so much less irritating than the acrid secretions, that it is by comparison soothing and emollient. When the disease has become decidedly chronic, we must have recourse to the remedies of which I spoke in my former paper.

Pleurisy. Several cases of acute pleurisy have been admitted, through the course of the winter. They were all treated on a plan somewhat different from that usually practised, and with success, although the disease had existed, in every instance, from two or three days, to two weeks. To bleed with an unsparing hand from a large orifice, and in the manner best calculated to make the speediest impression on the system, is the invariable recommendation of the best writers. If one bleeding fails to afford very decided relief, we are advised to repeat it in a few hours, and to resort to the operation again, at more or less distant intervals, according to the urgency of the symptoms, and the capability of our patient to bear further loss of blood. The general rule, adopted by some practitioners, as to the limits to which sanguineous depletion should be carried, is deduced from the strength of the patient, and the relief of the pain and irritability of taking in a full inspiration. In conjunction with the general bleedings, cups and leeches are to be applied to the affected side. This course of blood-letting, combined with purgatives, diaphoretics, diuretics, sedatives and mercury, occupies several days, and when the patient is thought to be in a poper state of preparation, the fever being sufficiently reduced, or in other words, brought down to the blistering point, blisters are directed to be applied over the seat of pain.

The plan which I have followed during a number of years, and in no instance has it failed of effecting a speedy cure, differs from the foregoing in the following particulars, viz: immediately after a free bleeding from the arm, a blister is applied to the side, and half a grain, or if that nauseates too much, a quarter of a grain of tartrate of antimony is given every two hours. Fifteen or twenty grains of calomel, combined with five or six of pulvis antimonialis, are given at bed time; and if the bowels are not acted upon two or three times, pretty freely, against morning, a moderate dose of Epsom salts, or castor oil is exhibited. After the purgatives have operated, recourse is again had to the antimony. The second night at bed time, ten or twelve grains of Dover's powder are given and repeated every night, and in the morning the antimony is resumed. In three, or four, or five days, the antimony may be discontinued, or the dose very much diminished. In very few cases have I found it necessary to repeat the bleeding from the arm, and cups and leeches have not been employed at all, neither is any other medicine for the most part required; inasmuch as the antimony generally keeps the bowels sufficiently open.

The objection which I suppose lies againt the practice of postponing the application of the blister until the patient shall have been repeatedly bled, cupped and leeched, is, that although the first bleeding, by abstracting a certain portion of the circulating fluid, and reducing the action of the heart relieves the congestion of the affected vessels, and diminishes or entirely removes the pain, as the blood-vessels soon fill up again, and the heart recovers in a great degree its former power and force of action, lessened somewhat, it is true, by the blood being of a less stimulating quality from the increased quantity of serum it contains, the vessels of the inflamed pleura are distended afresh, and the pain, and fever which arise from it are renewed, of course accompanied by the dyspnœa. In this way the symptoms disappear and reappear alternately, in greater or less degree, until the patient is so much reduced that there is not force enough in the heart's action to cause a return of the distension of the inflamed vessels. When bleeding is carried to this extent, the disease is subdued, and a blister is of comparatively little service. The patient will now get well under mild treatment, as fast as he can recover from the debility produced by the remedies.

But suppose the blister is applied immediately after the first bleeding, before the excitement has time to return with its former force, we have all the benefits of counter-irritation from this remedy; a new inflammation has been set up on the surface, directly opposite the principal seat of the original disease; arterial and nervous action are determined towards this part; and, as a necessary consequence, if the doctrine of counter-irritation is good for any thing, there is diminished action inside. The new disease draws off the morbid action from the old one, and the symptoms of pleurisy do not re-appear. Or it may be said, that the external stimulation rouses the latent powers of the vessels of the inflamed pleura, and they do not suffer themselves to be again dilated so as to cause pain. Whatever theory of counter-irritation we may adopt, there is no doubt of the fact, that the disease of the skin produced by a blister, does diminish internal inflammation. This is universally admitted; and the only question now at issue, is as to the time of applying it.

The objection brought against the early application is, that there is great danger that the irritation of the blister itself may increase the fever, to a degree which will more than counterbalance the good that might otherwise result from its remedial virtues. That the increase of the general excitement may augment, in place of lessening the local disease. This is a question of fact, which can only be settled by observation. I can only say that I have not found this to happen. On the contrary, the reverse has constantly occurred. The pain, the dyspnœa, the cough and the fever have all been diminished, and the patient has invariably expressed himself as being better. This, indeed, is what we might expect from sound physiological and pathological views of the subject. For, although it must be admitted that blisters are irritants, and if applied in a healthful condition of the system, would cause more or less fever; it is, notwithstanding, a fact, that where a much more intense irritation exists internally, as in the cases of pleurisy and peritonitis, the heart, through the medium of the nervous system, does not feel the irritation of the skin; but this inflammation, when compared with the more severe pleuritic affections, is as nothing; and in proportion as it relieves the symptoms of the diseased pleura, will it act as an anodyne, and allay morbid excitement; or, in other words, diminish fever. It is on this principle we explain the fact, that our patients will sometimes sleep during the whole time a blister is drawing; which, in many instances, is the first sleep they have had during several days and nights.

Case. Laceration of Urethra—Abscess of Leg—Phlebitis.—J. A——, ætat. 30, full and muscular, was admitted into the Alms-House Hospital, November 19th, 1838, in consequence of injury sustained by a fall, from no great height; but having come down astride of a board, the perineum received the whole force of his weight, and being a large heavy man, there was considerable contusion. On the afternoon of the same day, he was admitted, and I found him complaining of great pain in the perineum, with difficulty of passing his urine, which came away in small quantity, accompanied by a good deal of blood. The bladder could be plainly felt above the pubes, and was painful on pressure. There was no external wound, but the scrotum and perineum were black from ecchymosis. I attempted to introduce the catheter, intending to leave one of gum elastic in the bladder; being apprehensive from the injury done to the urethra, that there would be infiltration of urine into the scrotum and perineum. The instrument could not be passed farther than the membranous portion of the urethra, although different sizes were employed. Blood flowed freely from the penis during the trials; and what was much more gratifying, urine came away in sufficient quantity to relieve the bladder. Fomentations were applied to the perineum; the bowels opened with a laxative; and rest enjoined. I fully expected infiltration of urine, with a return of the retention; and that I should have to make free incisions into the scrotum and perineum, to allow the escape of the urine, and prevent extensive sloughing; and also to open a passage into the bladder, along the course of the urethra, from the perineum. Contrary to my expectations, there was no farther accumulation of urine in the bladder; neither was there any infiltration. The urine passed off by the urethra, as soon as the bladder was moderately full; some blood being also voided during several days; and each micturition being attended by excruciating pain. The pain, however, in a few days moderated, and then disappeared altogether. The discharge of blood ceased, the urine flowed freely, and I thought my patient was in a fair way to recover. The ecchymosis of the perineum and scrotum continued longer. I now came to the conclusion, that the urethra had not been lacerated, but simply contused; as I did not recollect any case of laceration of that tube, unaccompanied by infiltration of urine into the surrounding cellular structure.

About a week after the reception of the injury, a new symptom presented itself, viz: swelling and pain of the calf of the right leg; and in about another week, the left ankle also became painful and tumid. The swelling extended in the course of a few days, to the feet, which became œdematous and greatly distended. The right leg, as far up as the knee, also became œdematous. The pain was excruciating; and the skin, at first, was slightly reddened, especially that of the left ankle. Various applications were made to the inflamed parts. Emollient poultices were first tried; but as they gave no relief, they were soon exchanged for cooling lotions. White wash and spirit wash were applied, by means of cloths kept constantly wet with them. The former is the liquor plumbi subacetatis solutus, of Wood and Bache's Dispensatory. The latter consisted simply of water, and a small portion of proof spirit, to make the evaporation more rapid. These mitigated the pain but little, and the parts were then enveloped with cloths kept constantly wet with water as warm as could be borne. This gave more relief than any other application. His system had received such a shock, and the pulse was so feeble, that I did not think blood-letting admissible. He was, however, purged moderately, and low diet was prescribed.

No cause could be assigned for the inflammatory affection of the two limbs. He did not complain of any injury having been done to them, when he came into the hospital. I was therefore disposed to regard the affection as an inflammation of the cellular and ligamentous tissues, arising, in a bad condition of the organism, from the urethral irritation. The swelling of the limbs continued to increase, the skin becoming pale from the effusion of serum in the sub-cutaneous cellular tissue; and he began to complain of pain extending up the thigh, along the course of the great blood-vessels, which was greatly aggravated on pressure; particularly at the upper part of the thigh, just below Poupart's ligament. The superficial veins of the thigh were now somewhat distended. There was no general tumefaction of the thigh. He gradually became more and more debilitated; the stomach became irritable; and he finally sunk on the 24th of December.

Autopsy 24 hours after death. A large abscess containing bloody pus, was found underneath the gastrocnemii muscles of the right leg, situated between them and the deeper muscles, and occupying two thirds of the leg, midway between the ankle and knee joints. The parts of the muscles adjacent to the abscess, were completely disorganised, being reduced to a soft pulpy mass. The posterior tibial, the popliteal, and the superficial femoral veins, and their continuation up to the junction of the common iliac with the vena cava, were lined with a thick, dense, false membrane, and filled with yellow pus. All the veins of the thigh were filled with pus in the same manner. None of these veins in which pus was seen, contained blood. The anterior tibial vein was not so much diseased as the others. At the termination of the common iliac vein, in the vena cava, a considerable quantity of a more solid matter was observed, apparently consisting of a mixture of lymph and pus, which blocked up the entrance into the vena cava, and probably prevented the pus from passing on towards the heart. There were redness and thickening of the ligamentous tissues around the left ankle, and some pus was found in the joint. A small abscess had also formed at the root of the great toe of the right foot. The bladder having been taken out with the penis, and the urethra slit up, a cavity about the size of a small walnut was seen at the beginning of the membranous portion of this tube, where it joins the bulb, into which both ends opened. The external end terminated abruptly, with a considerable depression, as if the tube had been cut off, then joined to the sac, and badly fitted. The end next the bladder was united to the sac by a smooth, level surface. The interior of the sac was lined by what seemed to be a perfect mucous membrane. The viscera were normal.*

Remarks. The calf of the right leg must have been severely contused by the fall; although he made no complaint of it. The pain about the region of the bladder was so excruciating, that the injury of the leg was not felt. The bloody pus contained in the abscess, proves that there was a contusion. The left ankle must also have been sprained. There was nothing peculiar about the phlebitis. It pursued its usual course, viz. effusion of lymph, formation of false membrane, and secretion of pus. The small

---

[* This case is an interesting one. It affords a marked example of traumatic phlebitis terminating in purulent depots, or what is considered by some writers, secondary abscesses. Some cases of a similar character are recorded by Dr. Watson, in his valuable memoir on Secondary Abscesses, in the No. of this Journal for November, 1837.—ED.]

amount of tumefaction of the thigh, might at first view cause surprise; but when we reflect, that the passage of the blood through the veins appears to be completely interrupted in phlebitis, these vessels containing nothing but false membrane and pus; and that the arteries are but little dilatable, under the strongest action of the heart, and are diminished in diameter, in states of debility, in proportion as the weakness is greater or less; our surprise will cease. It is the dilatation of the veins, which are susceptible of a great degree of distension, which is the principal cause of swelling of parts, antecedent to effusion taking place. In phlebitis, the veins are entirely relieved from the force of the heart's contraction; therefore they cannot be subjected to congestion of blood; and if effusion does not take place into the surrounding tissues, there will be little swelling. With so complete an interception of the venous circulation, one might expect to find gangrene and sphacelus. There was not however either of these conditions observable in the thigh. The disorganization around the abscess, was manifestly the consequence of the inflammation arising from the contusion. Although this patient was too much debilitated to allow of bloodletting from the arm, if leeches had been at hand, he might perhaps have been benefitted by their application along the course of the inflamed vein; or to the leg, on the first appearance of the swelling. Still it is doubtful, whether they would have prevented suppuration.

The most remarkable part of this case is the laceration of the urethra, without infiltration of urine as the consequence. The urethra was plainly torn across, and entirely divided at the arch of the pubes; probably by being driven against the arch; and nevertheless no urine passed into the surrounding cellular tissue. As far as I remember, this is an unprecedented occurrence. The sac which was seen, must have been formed by an effusion of blood, which dilated the parts, and caused a consolidation of the cellular tissue; thus forming a cavity filled with blood. When this blood coagulated, its fibrine may have partially separated, and adhered to the surface of the cavity, and thus cemented the plates of the cellular tissue together so as to prevent the escape of the urine. Or previous to coagulation, the blood may have filled the interstices of the cellular tissue, so that when coagulation took place, the urine could not find a passage. However we may explain it, the fact is unquestionable; and the wonderful resources of the system, are well exemplified, in the reparation of the damages.

Dysentery—Chronic Arachnitis—Chronic Gastritis—Malformation of the Genital Organs. G. W. ætat. 32, an idiot, was admitted into the Alms House on the 3d of July; and shortly afterwards attacked by dysentery, which became chronic; and he gradually wasted away under a diarrhœa; which was not however very severe, but could not be entirely checked, and was occasionally aggravated without apparent cause. He complained of pain and soreness of the lower part of the abdomen, for which he was cupped and blistered, with partial and temporary relief. He died December 18th 1838.

Autopsy 36 hours after death. Brain. There was considerable thickening and consolidation of the arachnoid membrane, covering both hemispheres of the cerebrum. The entire membrane was pulled off without laceration, the processes of pia mater, which pass between the convolutions, coming out readily with it. After washing in clean water, it was held up to the light, and exhibited the usual transparency: but was firm and unyielding, and considerable force was required to tear it into fragments. It did not appear to be changed from the normal condition, on the base of the cerebrum; but on the inferior part of the cerebellum where it passes from the medulla oblongata, it was thickened; and underneath this part there was a small quantity of sero-gelatinous effusion. The cortical part of the cerebrum did not present any thing remarkable. The convolutions were of the usual depth and shape. Mr. Reynolds, one of the students of the house, was disposed to think the convolutions deeper than is common, There was some congestion of the medullary matter. Red points were numerous when it was sliced; and the veins of the lateral ventricles, on the surfaces of the thalami, and in the posterior and inferior horns of the ventricles, were greatly distended with blood. The plexus choroides was not much congested. The septum lucidum, the fornix, and the surfaces of the thalami, were slightly softened. No morbid change was observed in the cerebellum.

Thorax. The right lung was healthy. Two thirds of the upper lobe of the left lung, adjacent to its junction with the lower lobe, were in a state of splenization having become as solid as a piece of liver; and presented a smooth red surface, when cut into, without the smallest appearance of granulation. There were no adhesions of the pleuræ, on either side.

Abdomen. The stomach, over the whole interior, was of the colour of slate, perhaps not quite so dark a blue; and on stretching it, red vessels were observed underneath the blue surface, forming a red ground. The mucous coat was softened, and when scraped, both the blue and the red colours came off, leaving the whitish muscular coat bare. There was no ulceration of either the small or large intestines. The lower part of the ilium for about ten or twelve inches in extent, was of a dark mahogany colour; and the mucous coat could be scraped off in the form of a red pulp. Spots of red softening were seen in the caput cœcum and ascending colon; and in the sigmoid flexure and upper part of the rectum, there were numerous small tumours of a dark blue colour, the longest one-third of an inch in diameter, formed in the mucous coat, and resembling punctated melanosis. The liver was normal as to size, but was of a dark purple colour, both externally and internally; the yellow medullary matter having entirely disappeared.

Genitals. These organs presented-an extraordinary malformation. Both of the testicles, of the normal size and feel, were contained in one tunica vaginalis, viz, that of the right side. They lay with what is commonly their anterior surfaces, directed towards each other; and were bound together by three or four bands passing off from their serous surfaces. The epidydimis of the right testicle looked towards the right thigh; that of the left towards the left thigh. Two *vasa deferentia* were given off, one from each epididymis, and were traced into the pelvis, through the external ring, down to the bladder. These tubes were normal. In addition to them, there was a third tube, of much larger size, along its entire course from the testicles, being fully as large, or larger than the biggest goose quill, which passes out from between the two testicles, communicating with the *tubuli seminiferi* of both, as was proved by injecting these tubuli with quicksilver through it, and by it containing serum from one end to the other, and terminated in the urethra of the apex of the prostate gland, viz, at the *caput gallinaginis.* About three or four inches from its termination it expanded, so as to be more than an inch in circumference internally; but it again contracted, so as to enter the urethra by a small opening. The two *vasa deferentia,* when about entering the abdomen through the external ring, attached themselves to the sides of this tube, and accompanied it to its entrance into the urethra, and opened into it, in the substance of the prostate gland. No *vesiculæ seminales,* diverging from the base of the prostate, were to be seen. This long tube appears to have been substituted for them. The coats of this tube were apparently the same, as those of the seminal vesicles, in other cases. After the entrance of the three ducts into the abdomen, they were nearly surrounded by the peritoneum; and also by a dense cellular coating; all of which formed a large cord, passing down into the pelvis. The external and internal abdominal rings appeared to be united into one, by the inner ring being drawn towards the tubercle of the pelvis. The spermatic cord consequently passed straight into the abdomen, there being no oblique canal. The ring was open, and there was a hernial sac, separated from the testicles by a thin cellular partition. This partition was covered on one side by the tunica vaginalis testis; and on the other by the peritoneum. The sac contained a portion of the ilium, which was early reduced, not having formed any attachments.

There was but one artery going down to the testicles; but it was about twice the size of the spermatic artery in ordinary cases; and it arose from the internal iliac, about an inch and a half, or two inches from the bifurcation of the common iliac artery. On the left side, an artery of not much smaller diameter, arose from the internal iliac, at the corresponding point; but instead of going out of the abdomen, through the rings, it ran forwards and upwards and terminated abruptly on the rectus abdominis muscle. The right spermatic vein originated from a large cluster of veins, in conjunction with the left, which cluster lay between the vasa deferentia, at the top of the testicles. The two veins continued together until they entered the abdomen, and then separated. The vein of the right side took the usual course upon the psoas muscle, and terminated in the vena cava. That of the left side was carried across the pelvis by a curious bridge which remains to be described. The fundus of the bladder did not pass forwards to the crest of the pubes, by about two inches, Just at the top of the bladder, there was a duplicature of the peritoneum, two and a half inches wide at the symphysis pubis, which stretched from one side of the pelvis to the other, and was attached to the psoæ muscles and brims of the pelvis on each side, thus forming a complete bridge across the cavity. Along the upper edge of this fold of the peritoneum, between the two layers, the left spermatic vein passed from the right abdominal ring to the left side, ran upwards upon the psoas muscle, and terminated in the splenic vein. The penis was of the largest size and well formed. The opening of the external muscle of the left side, which forms the external ring, was normal.

Remarks. It is an established fact in embryology, that the testicles, up to the beginning of the seventh month of utero-gestation, are situated in the abdomen below the kidneys, one on each side of the spinal column, and occupy all the inner face of the ossa ilia. About the end of the eighth month they pass through the external abdominal rings; and towards the termination of the ninth month, are usually found in the scrotum. Now according to the

Centripetal Theory of Development, of M. Serres, the very young embryo consists of two halves, separated by a line of division, through the centre of the spinal column, and by the coalescence of these two portions, the perfect fœtus is formed. Where the organs are double after birth, each lateral half forms its own; and where they are single, as in the cases of the scrotum and penis, the two lateral halves, which are developed apart from each other, unite along the mesial line. These being admitted facts, the question arises, whether in the case above narrated, the two testicles, in opposition to the ordinary law of developements, were originally formed on the right side; or did the left one, during the progress of embryotic existence, and subsequently to the junction of the two lateral halves, pass over to the right side? If one of the spermatic veins had got crossed over to the left side, I should be inclined to adopt the first conjecture. This division of the blood-vessels, the artery going off from the right, and one of the veins terminating on the left side, makes it impossible to decide as to the original portion of the left testicle. The junction of the left spermatic vein with the splenic vein is also uncommon. The connection of the vasa deferentia, and likewise of a large central tube, with the tubuli seminiferi is, I suspect, unprecedented.

There is nothing in this case, as far as the structural condition of the cortical part of the brain is concerned, to favour the theory of M. Foville and Pinel Grandchamp. They have conjectured, that the cortical substance is the seat of intelligence, whilst the medullary is intended to preside over motion. They think they have discovered, that in cases of imbecility, the convolutions are small, and the cortical substance is reduced to a very thin layer. Neither the one nor the other was observed in the above case. It may nevertheless have been, that the functional disturbance produced by the chronic arachnitis, was sufficient to have caused the imbecility of mind.

Hemiplegia—Dysentery—Mental Aberration. G. W., ætat. 50, an old sailor, of intemperate habits, has been an inmate of the Alms House since 1832. When first admitted was affected with hemiplegia of the left side. In walking his left leg was dragged along with difficulty; and was made to describe part of a circle; and he had very imperfect use of his left arm. His mind also was impaired, so that he was considered partially insane. He was extremely irritable, cross, and snappish; and ready to strike with the stick he used in walking, regardless of rank, any person who provoked him. He appeared to know what he was doing, and to understand what was said to him; but seemed to be incapable of self-control.

In the beginning of November he was attacked slightly with dysentery, which he suffered to run on without complaining, and it settled down into an intractable diarrhœa. He now became so offensive, from inability to restrain the discharges, that the attention of the head of the ward was attracted, and his case mentioned. The account the patient gave of his situation, was so confused that I could make nothing out of it; but the constant fæcal discharges in bed, showed plainly the nature of the disease. Various remedies were prescribed; some of which he took, and others he refused. Two or three times he seemed to be getting better; but he again relapsed to his former state; and he died on the 26th of December, 1838.

Autopsy. Brain. After removing the top of the cranium, on attempting to take off the dura mater, strong adhesions were found between the two surfaces of the arachnoid membrane; not only along the central margin of the right hemisphere, but also over the whole surface of the middle lobe of the right side. In the efforts to get the dura mater off, the arachnoid came away from the middle lobe, bringing with it the processes of pia mater from between the convolutions, and also portions of the cortical substance of the brain; which was found to consist of a soft pulpy matter, not changed in colour. On examination the whole of the middle lobe of the right hemisphere, with about half of the anterior and posterior lobes of the same side, were likewise found to be of the consistence of a soft pulp; so that on trying to lift a portion of it with the fingers, it tore asunder, showing it to be destitute of its usual adhesive properties. Both the medullary and cineritious matter were in this condition. The great mass of the left hemisphere was as firm and solid as when there is no disease of the brain, but the surfaces of the corpus striatum and thalamus of this side were slightly softened; as were also the septum lucidum, the fornix and corpus callosum. The last less so than the other two. There was an ounce or two of serum in the lateral ventricles, and a small portion under the arachnoid of the right hemisphere. The cerebellum was somewhat softened, but not in so great a degree as the cerebrum. The cineritious portion was here much softer than the medullary, and the left side was perhaps a little more altered than the right. The medulla oblongata and upper part of the spinal cord were normal.

Abdomen. There was red softening of the mucous coat of a portion of the middle and back part of the stomach; and the pyloric extremity was of a slate colour and softened. The colon and rectum exhibited marks of acute inflammation. There was red softening and ulceration of the mucous coat. The ulceration was not so extensive as is frequently observed; but was quite sufficient to account for the death of one with a constitution as much impaired as his was. The liver was of a dark purple colour; and nearly all the yellow medullary matter had disappeared.

Genitals. The testicles on examination showed the two surfaces of the *tunica vaginalis* of both sides, adherent over their whole extent. There was no other disease of the right one. It was perhaps rather smaller than usual. The left was manifestly in a state of atrophy. It was much smaller than the right. When cut into, but a small number of the tubuli seminiferi, could be seen between the anterior surface of the organ and the epididymis.

Remarks. The disease of the brain was amply sufficient to account for the hemiplegia and mental disturbance. M. Foville informs us, that in acute cases of madness, he has never observed adhesions of the membranes to the cortical substance, but that such adhesions are very frequent in chronic cases. This he imagines will explain the curable nature of recent maniacal affections, and the hopeless and incurable state of those who have long laboured under madness or dementia.

A large majority of those who die in this institution have been long addicted to habits of intemperance; and in every instance more or less of the effects of chronic gastritis is discovered. According to M. Andral the shades of colour which principally belong to this disease, are the gray slate colour, the brown colour, and the more or less deep black colour. These discolourations, with preternatural redness, and thickening and softening of the mucous membrane, are the common morbid appearances.

The adhesion of the two surfaces of the tunica vaginalis testis indicated the previous existence of inflammation. Those pathologists who believe in a close sympathetic connection between the cerebellum and the testicles, would ascribe atrophy of the left testis to the morbid state of the left hemisphere of the cerebellum. I do not think that this connection is as yet sufficiently established to justify such an inference. Neither is it necessary in the present case. The evidences of previous inflammation would satisfactorily account for all the morbid appearances.

Apoplexy—Palsy. S. P., ætat. 30; habits intemperate; admitted May 12th, 1838. Three days ago, while intoxicated, he fell down in a fit, and remained in a state of insensibility for two hours. On regaining his senses, he found his right side partially paralysed. He can drag his leg along with some difficulty, and move his arm in an imperfect manner. Has no pain. Functions natural. He was bled, purged, and blistered on the back of the neck; and in four or five weeks was sent out of the hospital, still limping a little. Three months after, he was attacked with enteritis, for which he was bled, cupped, &c., and when in a state of convalescence, he was suddenly seized with a chill, to which fever succeeded. He now lost all power of voluntary motion; his speech was embarrassed, and his fæces and urine passed involuntarily. He was cupped, blistered, and purged; and became greatly emaciated and debilitated. Sloughs made their appearance on the sacrum, and right ear. His teeth and lips were covered with sordes. Pulse small and feeble, and his appetite gone. By degrees these symptoms abated. His pulse became natural. The slough separated, and the ulcers healed; and his general health became pretty good. The paralysis, however, still continued unabated. About the beginning of December, he had so far recovered the power of moving the left arm as to be able to feed himself with some difficulty. He did not regain the use of his legs, and was unable to stand or walk. He also continued to pass the fæces and urine in bed; and he could not articulate so as to be understood, except by those accustomed to his mumbling and muttering, The sensibility of skin was natural, and continued so to the last. In the beginning of January, 1839, his remaining strength began to fail, and he died on the 21st of that month.

Autopsy. The brain alone examined. There was slight opalescence of the arachnoid, and a small quantity of serum effused underneath it. The ventricles contained about an ounce of clear serum. There were a few hydatids in the choroid plexus. The left optic thalamus presented in its central part, two cavities, each half an inch in length, by three lines in breadth. They were at the distance of half an inch from each other. Their walls were of a dirty yellow colour, and soft. The softness and discolouration, did not extend more than two thirds of a line into the substance of the brain. The right optic thalamus, about its centre, also contained a cavity, about as large as a cherry stone, similar in every respect to those just mentioned. The pons varolii, when opened through its centre, exhibited a fourth cavity, half an inch long, and three lines broad. At the point of bifurcation of the basilar artery, there was an aneurismal sac, of spherical shape, half an inch in diameter. The walls of the sac were thickened by the effusion of lymph; so that when emptied of its contents, it did not collapse. Some small patches of the coats of the basilar artery were likewise thickened.

Remarks. We have in this case a well marked example of the effects of habitual drunkenness upon the brain. The constant excitement had produced disease of the arterial system, and at length vessels were ruptured, and blood effused into the left optic thalamus. The ordinary processes of absorption of the extravasated fluid, and cicatrization of the lacerated brain, took place; and imperfect restoration of the function occurred. The fever which preceded the second attack of paralysis was probably brought on by sleeping with the windows raised. Whatever may have been the cause, it was during the excitement of the hot stage, that rupture of blood vessels again took place, in the right optic thalamus, and pons varolii, producing general palsy. The energies of the system were, however, again roused, and absorption and cicatrization were a second time effected; but the recovery was now much less complete; and the vital functions were so imperfectly performed, that he at length succumbed.

The seats of all the injuries were in the course of the motor tracts, and hence motion alone was impaired. The cavity in the pons varolii occupied its anterior part, and consequently did not involve any of the fibres of sensation.

Apoplexy—Palsy. G. B., ætat. 40, of robust frame, has been an inmate of the house for the last ten or twelve years. About the time of his admission had an attack of apoplexy, which was succeeded by paralysis of the right side. He recovered so far as to be able to walk about with the assistance of a cane, and to perform various menial duties. His general health was good. On January 21st, 1839, while engaged at his ordinary work, he staggered and fell, and was brought into the hospital in the following condition. There were violent convulsions of the whole of the right side, with complete paralysis of the left side. The mouth and head were, with intervals of a few seconds, drawn spasmodically to the right side. His consciousness was perfect; but his articulation embarrassed. He complained of pain of the head. Pupils were not affected. Pulse slower than natural, and labouring. He vomited a full meal, which he had taken a short time previous to the attack.

About forty ounces of blood were taken from his arm; during the flow of which, he had an evacuation from the bowels, consisting principally of undigested beets, which he had eaten the day before. Three drops of croton oil, and a purgative enema were administered, which operated freely; and a blister was applied to the back of the neck, which also acted well. No improvement, however, followed these remedies; the symptoms became worse; and he died forty-eight hours after he was attacked.

Autopsy, twenty-eight hours after death. Brain alone examined. On removing the cranium, the sinuses of the dura mater were discovered to be very much gorged with black blood. The inner surface of the cranium, particularly along the course of the superior longitudinal sinus, was covered with drops of this fluid. The glandulæ pacchioniæ were in great number, and largely developed. The pia mater was very much congested. There was some effusion of dark coloured blood on the summit and outer face of the left hemisphere of the cerebellum; and a small quantity along the inferior and posterior edge of the adjacent lobe of the cerebrum; all of which had apparently escaped from the fourth ventricle. When the brain was sliced, and the drops of blood which oozed from the vessels scraped off with the back of the scalpel, the open mouths of the vessel were very distinct. Both of the lateral ventricles were distended by clotted blood; more fluid, however, in the left than in the right. The right ventricle contained a clot as large as a guinea fowl's egg; and also masses of pulpy brain, coloured and broken up by an admixture with the blood. The posterior third of the corpus striatum, and the whole of the optic thalamus of this side, were completely disorganized by an effusion of blood which appeared to have taken place from the latter. The walls of the cavity formed by the hæmorrhage were red and softened, to the depth of two or three lines. Where the brain was yet firm around the cavity, in its immediate vicinity, there were numerous black spots, as large as pins' heads, caused by extravasated blood. No vessels were visible. The greater part of the blood in the left lateral ventricle was fluid. The septum lucidum was ruptured in two places; near its anterior part, and at its middle; and a free communication was thus formed between the two ventricles. At the anterior part of the optic thalamus of the left side, just at its junction with the corpus striatum, there was a cavity about six lines in length, and from two to three lines deep, evidently the consequence of the former effusion of blood. It was lined by a firm, rugose membrane of cellular tissue, of a pink colour. There was an aperture by which it communicated with the ventricle. The substance of the brain around this cavity was much darker, and a little softer than the rest of the cerebral mass. The choroid plexus contained a large number of hydatids, some as large as a pea. That part of the optic thalamus of the right side, which forms the lateral wall of the third ventricle, was lacerated, presenting a circular opening of four lines in diameter, its edges ragged and soft, and the cavity filled with coagulated blood. The third and fourth ventricles were both distended by this fluid. The rest of the brain presented nothing remarkable.

Remarks. In this, as in the former case, there were traces of an old effusion of blood, which satisfactorily explained the first apoplectic attack. The time which intervened between this and the fatal seizure, was unusually long. Serres and Foville assert, that lesions of the corpus striatum and anterior parts of the brain are followed by paralysis of the lower extremities of the opposite side, and that lesions of the optic thalamus, or posterior parts of the cerebrum, cause paralysis of the upper extremities. The optic thalami, in both the foregoing cases, were the principal seats of injury, and the lower extremities were as much, or more affected than the upper. There was also, it is true, in the former case, effusion into the pons varolii, which renders it somewhat ambiguous, as we cannot know the precise time at which it occurred. There is, however, a strong probability that it did not take place until the second attack, when general palsy made its appearance. We can scarcely imagine it possible for effusion of blood to be made into the middle of the anterior part of the pons varolii, where the motory fibres are concentrated into a narrow space, without general palsy being the consequence. Supposing then, that the effusion into the pons varolii occurred at the second seizure, we have the lesion of the left optic thalamus to explain the original palsy of the right side. The lower extremity was as much affected at this time, as the upper, which is in opposition to the views of Serres and Foville.

In the latter case, we have the lesion of the left optic thalamus, to account for the hemiplegia of the right side. Both leg and arm were here involved. But it may be said, that it was the anterior part of the thalamus, adjacent to the corpus striatum, which was the seat of the injury. It is impossible to tell how far the corpus striatum may have been disturbed by the pressure of the extravasated fluid, when first poured out; neither can we say with certainty, to what extent the functional action of this part remained imperfect, in consequence of the derangement of structures around the cavity, which resulted from the primary lesion. Additional facts would seem to be required to establish the supposed connection between the anterior parts of the cerebrum and the lower extremities; and the posterior portions and the upper extremities.

Syphilis—Phagedenic Ulceration—Aneurism of left internal Iliac Artery. R. C. ætat, 32, was admitted into the female syphilitic ward, September 25th 1838. On the inner side of both nymphæ there is an extensive ulceration, passing a short distance into the vagina. This ulcer has a dark, foul, unhealthy appearance. Her general health is considerably impaired, and she is much emaciated. Pulse frequent, small and feeble. Emollient fomentations were applied to the sores, and infusion of colombo, gentian, and chamomile flowers, was ordered. The ulceration, however, proceeded until both nymphæ were destroyed, as also the meatus urinarius, and the soft parts up to the clitoris. It likewise extended fully an inch into the vagina, burrowing behind the rami of the pubes and eschia on both sides, forming an immense cavity. She was now put upon extract of cicuta, of which she took five grains three times a day; and by keeping the parts clean, by frequently injecting tepid water, the ulcerative process was arrested, and healthy granulations sprung up, with every appearance of speedy cicatrization. At this time she was attacked with hæmorrhage from the left side of the ulcer, behind the rami of the pubes and ischium; at first in small quantity but recurring at intervals of a few days, and requiring the use of pressure by passing a piece of sponge into the cavity, formed by the ulcer. In this way the bleeding was easily restrained. The ulcer on the right side cicatrized, while that on the left was kept open by the occasional occurrence of the hæmorrhage. She continued in this state for four or five weeks, gradually becoming weaker, and died the 23d of November

Autopsy. Emaciation great. Both of the nymphæ are entirely destroyed. On the left side, opposite the os externum, there is a superficial ulcer, one inch wide, and extending from the posterior commissure to the mons veneris; about the centre of which, on the inner side of the rami of the pubes and ischium, there is a fistulous opening, three lines in diameter.

On opening the abdomen, a considerable quantity of coagulated blood was found in different regions of this cavity, in the hypogastric right and left iliac, and right hypochondriac—forming, in the latter situation, a layer of four or five lines in thickness, between the convex surface of the liver, and the walls of the abdomen. The uterus is a little hypertrophied, and is pushed from its natural position, far over to the right side, by a tumour formed in its left lateral ligament, through which the effusion into the sac of the peritoneum had taken place. The tumour when opened was found to contain a mass of clotted blood, in the centre of which, there was a portion of dense, lancinated fibrine, about the size of a hen's egg. It contained a cavity an inch in diameter, which communicated above with the internal iliac artery, the coats of which, as high as the ilio-lumbar artery, were thickened, and easily lacerated. There was a sinus passing from the aneurismal tumour to the vagina; and opening on the surface of the ulcer, inside of the pubes and ischium. Most of the branches of the internal iliac were destroyed at their origin. The sciatica nerve was surrounded by indurated cellular membrane, where it passes over the short rotations of the thigh; and its roots were enveloped by coagulated blood.

Remarks. Phagedenic ulceration is one of the most dangerous and unmanageable forms of syphilitic disease. It is almost always rendered more inveterate, and more rapid in its progress, by mercury. The antiphlogistic treatment, with anodynes, to allay irritability, is unquestionably best adapted to arrest the progress of this destructive ulceration. Mr. Carmichael, in his "Essay on Venereal Diseases," has given us the best treatise on this subject. Absolute rest in the recumbent position; venesection in proportion to the extent of the pain, inflammation, and symptomatic fever; antimonials in sufficient doses to nauseate; warm poultices of bread and water; warm fomentations, either in the form of stupe, or injected between the prepuce and glans; opium, hyoscyamus, and cicuta, in sufficient doses, to lessen pain and irritation, and procure rest at night, are the means he relies upon during the inflammatory and active stage. Afterwards when it excites but little uneasiness, and creeps slowly along, healing in one place while ulcerating in another, the solution of nitrate of silver, in the proportion of one, two, or three grains to an ounce of distilled water, he tells us, may be of service; or the mercurial black, or yellow washes agree well in some cases, while in others, it must be admitted, that no application seems to check the progress of the ulcer.

Stimulating applications, he farther says, are often extremely useful to sloughing venereal ulcers, such as venice turpentine, or balsam copaiva, blended with one or two parts of olive oil, or a lotion composed of one part of tincture of myrrh, to seven of camphorated mixture. They correct the fœtor of the sloughs, and stimulate the sound parts to cast them off; but unfortunately, he admits that they have not the power of preventing their renewal.

I have never seen permanent benefit derived from stimulating applications. In one case, where the greater part of the glans penis was destroyed, they had a full and fair trial, after fomentations and poultices; and it was not until they were all discontinued, and the sore dressed with dry lint twice a day, and washed clean with warm water, before each dressing, that healthful granulations sprung up, and cicatrization commenced. It then speedily healed.

In the case of R. C. narrated above, the debility was so great, that tonics appeared to be indicated. Her general health improved under the use of the bitter infusion, but the ulcerative process was not suspended. The cicuta, which I have employed in other cases, was manifestly of great service. I regard it as the best anodyne in these cases. The dose may be increased to ten grains of the extract three times a day, if a smaller quantity does not answer the purpose.

If the aneurismal tumour had not been present, this woman, in all probability, would have recovered. No pulsation was detected, and she made no complaint which could have led to the discovery of the aneurism. There was a dull and aching pain about the hip and down the leg, which was supposed to be rheumatic. But even if it had been known that there was aneurism, in her debilitated state it would have been worse than folly to have attempted to cure it by operation.

Pleuro-Pneumonia.—T. P., ætat. 42, admitted February 11th, 1839. Ten days ago, after exposure in a damp cellar, he was suddenly seized with severe pain of his left side, which was speedily followed by a chill, and high febrile excitement, accompanied by dyspnœa. A young physician was called in who told him he had a bad cold, and that he had seen cases terminate in pleurisy. He prescribed some powders which induced excessive catharsis. He afterwards applied a blister to the side, and then a pitch plaster. When he entered the hospital, his expression of countenance manifested great anxiety and prostration. His respiration was very much embarrassed. There was complete dulness of the left side of the chest, both in front and behind; also bronchial respiration and bronchophony, and tracheal rattle. Pulse 120, small and feeble; discharges from the bowels involuntary. A blister was applied to the chest. He died at three o'clock in the morning of the 12th of February.

Autopsy. Thorax. The whole surface of the left lung adhered firmly to the pleura costalis, and thick flakes of recently effused lymph were spread over the lower and middle portions of it. About eight ounces of serum were found in the cavity after the removal of the lung. The pleura lining the ribs and covering the diaphragm, was intensely red; and numberless minute capillary vessels carrying red blood, anastomosed freely with each other, in the sub-serous cellular tissue, and presented injected patches of various forms. The pleura pulmonalis exhibited a similar appearance. The whole of this lung, with the exception of a small portion of the anterior part, which lay next to the sternum above the base of the heart, was in the second and third stages of the effects of inflammation. The upper half of the superior lobe was hepatized. It was solid, and inelastic to the touch; was not crepitous, and when cut into yielded no bubbles of air; but when pressed, a bloody fluid exuded sparingly from it. This portion was also filled with granulations, which were very perceptible on tearing the lung; and it was likewise mottled with black pulmonary matter. The whole of the lower lobe, and the remainder of the upper lobe were in a state of purulent infiltration. The reddish, mottled appearance of the hepatized portion, was exchanged for a yellowish drab, or stone colour, approaching to sulphur-yellow. On cutting into it, no granulations could be seen: but a yellowish, opaque purulent matter, oozed from it. The slightest pressure with the fingers made a cavity, which immediately filled with pus. The texture was extremely soft and friable. The right lung was normal.

Abdomen. The mucous coat of the stomach was red and softened over nearly the whole surface. A few patches, at different places, were of the natural colour. The duodenum was slightly reddened. The jejunum, along its whole course, was intensely red, and the mucous coat was also softened. The redness and softening were continued into the ileum; but in a diminished degree. The upper part of the colon, in the vicinity of the caput cœcum, was of a light pinkish hue, but was only in a slight degree softened.

Remarks. We here have a strongly marked instance of the defects of our system of medical education. A young man of fair talents, who had passed through a full course of medical lectures, and obtained his degree, regarded the symptoms of the above case, as indicative simply of a "bad cold;" by which it may be presumed, if he attached any precise meaning to the terms, he intended to call it a case of acute bronchitis. Acute bronchitis, however, does not terminate in pleurisy. That form of it, in which the pulmonary vesicles, and smaller bronchial tubes, are the seats of the inflammation, passes readily into pneumonia; but does not become a pleurisy. Whatever opinion may have been entertained of the pathology of the case, it is manifest from the treatment, that it was regarded as one of no great severity. No blood was abstracted; but purgatives were exhibited to the extent of producing hyper-catharsis; and after death we find a most intense jejunitis; which doubtless had been caused by the drastic cathartics. The blister not having been preceded by blood-letting, must certainly have increased the febrile excitement; and the burgundy pitch plaster, in a case of acute inflammation of the chest, was, to say the least, a strange remedy.

Now it must not be supposed that I think the blame should attach solely to the practitioner in this case. I consider the chief defect to be in the system of education, under which he obtained his degree of Doctor of Medicine. It is impossible for any man, however great his talents, to become so familiar with the diversified forms of disease, as not to be perpetually making mistakes, by merely reading in an office, and attending two or three courses of lectures, of four months' duration. Until the course of study is lengthened, and more diligent and careful attendance upon hospital practice, and to morbid anatomy and pathology are required, similar blunders will be incessantly recurring. In private practice, the opportunities for making post mortem examinations are so few, that students seldom behold, in a single instance, the ravages of morbid action; and what is worse, physicians themselves cannot discover, and consequently do not profit, by the mistakes of which they are guilty.

The remedy consists in prolonging the course of study; insisting upon longer attendance upon clinical instruction; and to have a professor of pathology, and pathological anatomy; whose course of lectures and demonstrations shall be considered of greater importance to the mere physician, than all the others combined.

Dysphagia.—W. C——, ætat. 50, habits intemperate, but his health, previous to his present disease attacking him, was good. Admitted, December 5th, 1838. Six months ago, without any premonition, experienced some difficulty in swallowing his dinner. There was no pain, nor uneasiness; but the dysphagia gradually increased, and finally compelled him to seek admission into the Alms-House. He is very much emaciated and anemic. His appetite has always been good. He swallows fluids better than he does solids. He takes eight or ten tablespoonfuls of soup, with bread soaked in it, in rapid succession, when inverted action of the œsophagus takes place, and more than half is returned. Has no pain nor soreness when he attempts to swallow. There is slight uneasiness and a sense of obstruction at the top of the sternum; which probably arises from the distension of the œsophagus by the soup. Pulse regular, but small and weak; bowels in good order; respiration easy; voice reduced to a hoarse whisper; fauces inflamed. A probang introduced into the œsophagus, passed to within four or five inches of the stomach, when it was firmly resisted. Capsicum gargle was ordered for the throat. Ivory probangs of medium size were passed through the stricture into the stomach, with the effect of entirely removing the dysphagia. For a short time he improved rapidly in appearance, and became considerably fatter. From one to two weeks were suffered to elapse before the operation was repeated, in order to prevent dangerous irritation. The last time the instrument was introduced, a small quantity of pus and blood was brought up. The dysphagia was not very troublesome after this; but in a few weeks he again began to decline. The inflammation of fauces extended to his tongue; his voice became more whispering, and he died April 10th, 1839.

Autopsy. About eight inches of the lower part of the œsophagus was one ragged ulcer. The mucous membrane was entirely destroyed; and also the greater part of the muscular coat. The ulceration extended an inch into the stomach beyond the cardiac orifice, and terminated abruptly by raised edges. Three small masses of hard, cheesy matter were found around the edges of the ulcer, where it terminated in the stomach. Along the smaller curvature, the stomach was red and softened. The œsophagus, in the neighbourhood of the cardiac orifice, and likewise the stomach, adhered to the liver by effusion of lymph. Where the liver lies over the œsophagus, there was an hepatic abscess, containing six ounces of black, thick, soft matter. This abscess did not appear to have opened either into the œsophagus or stomach. The pharynx was red, and the mucous coat thickened. The velum pendulum palati was greatly thickened and indurated. The posterior part of the tongue, on its upper surface, had its covering greatly thickened and indurated; and the papulæ were very much enlarged. The half of the lingual surface of the epiglottis, next its base, was thickened and indurated; the mucous coat having numerous rounded prominences on it. The larynx was free from disease. The lungs were large and contained a few tubercles—probably not more than half a dozen. The bronchial mucous membrane was somewhat reddened; and the tubes contained a quantity of frothy mucus.

Remarks. This, I suppose, is an example of what would be called scirrhus and cancer of the œsophagus. There was not as much induration of the tissues, as we usually find where scirrhus degeneration exists; but this may have been owing to the extent to which the ulceration had proceeded; by which process, softening had taken place. If the scrofulous diathesis had been strongly marked, by the deposition of tuberculous matter in the lungs and other parts, I should be disposed to call it a case of scrofulous ulceration. But as this was not the fact, and as the lumps taken out of the margins of the ulcer, in the vicinity of the cardiac orifice of the stomach, were harder than tuberculous matter ordinarily is, it may safely be called carcinoma.

If the patient had lived long enough, the hepatic abscess would certainly have burst either into the stomach or œsophagus.

We here also have an instance of remarkable change of the voice without disease of the larynx. The thickening of the velum pendulum palati, and epiglottis, and the inflammation of the fauces, appear to have been sufficient to reduce the voice to a hoarse whisper, precisely similar to the state in which I have repeatedly observed it, when the vocal chords have been found tumefied and indurated, on examination after death.

Baltimore, May 1st, 1839.

ARTICLE VII.—*Successful Operation for the purpose of remedying a Deformity of the Leg; consequent to a badly set Fracture.* By CHARLES PARRY, M. D., of Indianapolis, Ind.

THE patient, upon whom this operation was performed, was a young man near the age of 22; a member of the bar, of fine talents, and considerable attainments.

The history of the case is as follows:—At the age of fifteen, while skating on the ice, he fell and broke his right leg; the tibia about midway, the fibula two inches lower down. The physician who was called to attend the case, was considered skilful, but of intemperate habits, and, most unfortunately for the patient, was intoxicated at this time.

In what manner he dressed the fractured limb, it is impossible to say; but in the course of three or four weeks, it was found quite firmly united: the bones forming an angle almost equal to a right angle, at the place of fracture. The patient had to walk with a crutch, the toes of the lame limb not touching the ground when he was in the erect position. When he sat on a chair, and placed both feet on the floor, the knee of the sound limb was five inches higher than the knee of the lame one.

After suffering in this situation near two years, the patient determined to consult some of the most eminent physicians through the country, in order if possible to have his situation alleviated. But they generally advised him to have nothing done; which advice he followed with all fortitude, for two or three years more; during which time he suffered such great inconvenience, that he finally concluded to make another effort, and determined to endure almost any pain, or submit to any plan of treatment that offered a feasible prospect of relieving him.

For this purpose, he went to Cincinnati, and consulted several physicians of that place; the most of whom again advised him to have nothing done, as they did not see much prospect of his obtaining relief. One or two, however, proposed to endeavour to break the limb over again, with the view of setting it straight. The patient being a person of strong mind and quick apprehension, was not satisfied of the practicability of this project; and as it was merely proposed and not urged with any warmth by the physicians themselves, it was not adopted.

The patient returned home; pursued the study of the law; was admitted to the bar; and commenced a lucrative practice. But still dissatisfied in his mind, (as he has frequently told me,) believing that something might yet be done to relieve his situation, and determined to submit to the first proposition that offered a probable chance of the desired result.

In this state of mind, I met with him in the summer of 1837; became intimate with him, when he gave me the history above related; and asked my opinion of his case.

After some deliberation, I stated that I thought he could be very materially benefitted by the following operation.

To cut down to the bones; dissect the muscles from them, and saw a little block out of the angle of each bone; bring the lower end of the limb in a line with the upper; retain them in juxtaposition by splints; and treat as a compound fracture.

As it was only necessary to convince the patient of its practicability, to have the plan adopted; he told me at once, I should operate, as soon as he could make arrangements for his necessary confinement.

My reasoning on the subject was thus: after the operation the case would be similar to a compound fracture, with probably less violence to the soft parts; that compound fractures, now a days, were generally succesfully cured, without a resort to amputation as formerly. I also, had in my mind the operation of Dr. J. Rhea Barton of Philadelphia, on the hip joint. I concluded the violence to the general system in this case would not be greater than in his; that if he could succeed in establishing an artificial joint, I certainly might succeed in forming a natural union; and let the worse come, the patient could not be a loser, for I could yet amputate, and the patient had repeatedly told me, he would rather have his leg cut off, than remain as he was.

On the 15th of January, 1838, assisted by Drs. Mason and Ford, others present, I proceeded to the operation already described. I had prepared myself with a small saw, from the plate and description of Dr. Barton's in his hip joint case, without which I would have found great difficulty in sawing the fibula; from its being so closely and firmly fixed against the outward flat surface of the tibia, and covered by the tibialis anticus muscle. Further, without this small saw, it would have been difficult to avoid wounding the anterior tibial artery; for, while severing the fibula, I had to introduce the end of a finger between the artery and bone; and permit the saw to strike against my finger.

In sawing the fibula, I had made my calculations for the two sections to meet at the posterior part of the bone; but after the block of bone was taken out, I found the leg would not yield to moderate force. I then took off another section from the lower end, the appearance of which indicated that, at the original fracture, a very thick spicula of bone had extended across the angle, acting as a brace; the triangular space being filled up by osseous deposition. After this was overcome, the limb was brought straight without further difficulty.

By this operation, the leg was increased three inches in length.

January 16*th.* During the forepart of the night the patient rested badly; complained of much pain; on taking a large anodyne, about one o'clock, rested much better till morning. The leg was kept in its proper position very snugly. This morning, 16th, seemed quite smart; pain trifling. About eleven o'clock change for the worse; such as increased pain in the wound, with sensations of smothering; burning at the heart; followed by a slight chill and subsequent fever; gave a mild cathartic of blue mass. and rhei. Rested tolerably during the afternoon. Medicine operated at nine in the evening; took a portion of salts; operated at one; after which, slept well until morning.

17*th.* Quite smart this morning; relished his breakfast; no pain except on moving the limb; during this afternoon and evening, suffers much from "starts and jerks," as he calls them, in his sleep, otherwise there is but little pain while the limb is still; says he is afraid to go to sleep for fear of its jumping so, which sometimes causes him to scream out with pain; during the night suffered excessively from starts; gave large anodynes, did not allay them, however; gently rubbing the thigh, with my hand, was the only thing that allayed them; and while that was continued, he slept easy and free from starts; a passage at nine 9 o'clock.

18*th.* No material change; suffers a great deal of pain; removed a portion of the dressings, which afforded some relief; got up and set in a chair, while the bed was made; slept during the night better than usual.

19*th.* Still improving; leg not so painful; some swelled; pus; looks very healthy.

23*d.* The leg has been gradually improving until this morning, when from some unaccountable cause, the system became too much relaxed and weakened; the wound has a bad appearance, and gaping; granulations of a leaden colour. Gave quinine freely, generous diet, and stimulating applications to the wound, &c.

25th, *26th*, *27th*. Improving finely.

28th. During the morning felt better than he has been at all; but in the afternoon met with a very serious accident; felt very smart; had a number of his acquaintances in the room, paying him a visit; was sitting up in bed, scratching his leg, as it itched considerably, when upon reaching too far to scratch his foot, and suddenly throwing the weight of his body forward, he broke up the new adhesions of the bones, and deranged their position; this caused him so much pain that he nearly fainted. Some hemorrhage proceeded from the wound; I found it impracticable to adjust the bones at this time, from the excessive pain the least motion produced.

29th. Very restless last night; appears to labour under extreme morbid sensibility. Says the snapping of a penknife, or the jar of a glass tumbler, shocks his whole body; during the night troubled in an unusual degree, with starts and jerking, this morning leg very much swollen. Large anodyne; poultice to the wound.

30th. Swelling of the leg increased; pain excessive; seems very drowsy, probably owing to the large portions of anodyne he necessarily took last night. Cathartic, poultices continued.

31st. Seems every way better; swelling reduced; with the assistance of Drs. Mason and Ford, I reset the leg.

February, *1st*, *2d*. Tumefaction running high again.

3d, *4th*. Jerking excessive; tried enormous doses of anodyne equivalent to xij. grs. of opium at a time; repeated frequently; this not able to suppress it, nothing but the rubbing of the lame thigh does any good.

15th. Patient gradually and slowly improving; sets up most of the day in an arm chair; gets about the room with the aid of a crutch.

27th. Patient improving finely; went out of doors and walked up town with one crutch; is able to bear considerable weight on the lame foot.

March. Towards the last of the month, patient started on a trip to Wisconsin Territory to examine the country; went by water.

Remarks. I am fully satisfied that, in this case, mine was the only practicable operation that could have been performed. Had the limb been put in the pullies, as proposed by the Cincinnati physicians, I am confident the leg would not have broken at the desired place, from the great thickness of osseous matter there; but probably, if they persisted, would have broken, two inches or so, either above or below, which would have made the leg even worse than before. However much I had to regret the accident that befel the patient in the displacement of the bone, I have nothing to reflect upon myself from neglect, or otherwise, as it was entirely the patient's fault, his own accident; I deeply regretted it, because it gave him so much additional pain, and put him back three or four weeks, when he was doing well, and had passed the worse period of confinement; and we were unable to fix the leg as straight as before the accident. I consider there was no position more favourable for the displacement of the bone, than the one he was then in, sitting up in the bed laughing with his associates, the heel resting on a firm foundation, and the only support under the wound was a bunch of cotton, as we had just taken the most of the dressings off, for the purpose of gently scratching the limb, which itched intolerably. In this position, suddenly throwing the body forward, putting into a state of tension the muscles inserted into the tibia and fibula, at the same time sending an impetus or force along the femur; from it continued to the bones of the leg; the heel could not sink, but the bones did at the wound.

I was highly gratified by meeting with the report of Dr. J. Rhea Barton's anchylosed knee case, in the February number of the American Journal of Medical Sciences; where the principles in surgery that are involved, and their applications to the benefit of his patient, is exactly the same as in mine, modified only in situation. At the time that I operated, I had never heard of his operation, although it had been performed more than two years previous, but not published until the February following.

Indianapolis, Ind., March 30th, 1839.

[Note.—The preceding case is an interesting one, and the expedient resorted to for the relief of the patient, is highly creditable to the ingenuity of the surgeon. The plan of treatment, as observed by Dr. Parry, is identical with that previously adopted by Dr. J. R. Barton, for the relief of a patient suffering from an anchylosed knee. It is probably not generally known, that operations of a similar character have been also performed in Europe: the following notice of three of them, all that we know of having been recorded, may be therefore considered as an interesting complement to this paper.

M. Clemot, surgeon in chief of the marine at Rochefort, has, in two instances, made resections of portions of the femur, in order to remove great deformities resulting from fractures badly treated. The first case was in a child in whom the treatment by extension, though persisted in for several months, had failed. The operation was performed in December, 1834. A longitudinal incision, two inches in length was made over the callus, and the bony angle fairly exposed. The fragments had united at an angle of about 112 degrees. Spatulas were placed beneath the bone in opposite directions in order to protect the soft parts, and the angular projection protruded. With a small saw, a section perpendicular to the axis of the superior fragment was made, including but two thirds of its thickness. A like section was then made for the inferior fragment. The loss of substance was not great, and was at the expense of the callus. The limb was then placed in a good position, and the fragments maintained in apposition. Seventy days after the operation the child was removed to Bordeaux, having the limb straightened and lengthened.

The second case, was that of a husbandman, ætat. 27, who, fourteen months and a half previous to the operation, had met with a fracture of the left thigh a little above its middle. After the cure, the femur remained deformed, and bent to an angle of 130 degrees—the summit of this appearing at the external and anterior part. The limb was shortened five inches, the leg and the foot carried inwards, and the patient unable to walk. The callus was perfectly firm. Resection of the angular projection was made in February, 1835, and the limb afterwards placed on the double inclined plane. Seventy days after the operation, the inclined plane was removed, the leg and thigh being still kept in a state of semi-flexion, but slight motion allowed. The date of his discharge is not mentioned, though it is stated that he was able to support the weight of his body on the limb, and had a lameness scarcely perceptible.

The above cases are extracted from a memoir by M. Clemot, entitled, "*Sur la resection du fémur pour un cal vicieux,*" presented to the Academie de Médecine of Paris, 24th of May, 1836.

M. Wasserfuhr of Stettin has also performed a nearly similar operation on a child ætat. 5, to remedy an angular deformity of the femur above its middle part, following a badly treated fracture. In his case, the fractured bone was consolidated in such a manner as to form nearly a right angle, and the limb was shortened to the extent of *twelve fingers breadth.* The operation was difficult, and followed by severe symptoms, but the patient recovered.*

Since the preceding was written, we have received the No. of Guy's Hospital Reports for April, 1839, and find in it an account of a similar operation recently performed by Charles Aston Key, Esq. for the cure of deformity of the tibia, occasioned by a gun-shot wound.

The subject of this case, Captain Charlton, had the tibia of his right leg fractured by a musket ball, on the 17th of August, 1835, in Assam, East Indies. "It appeared, from the history of the accident and subsequent treatment, that a considerable portion of bone having been lost on the inner side of the tibia, the broken ends had united at an angle, in the same manner and from the same cause as an ulcerated spine acquires an irregular form from loss of substance on the anterior part of the vertebræ. The upper part of the tibia had not only formed an angle at its point of union with the lower portion of the bone, but also deviated from its natural line in relation to the femur. Its head, with the articulatory surface, had been somewhat forced outwards, so that an appearance of obliquity was given to it when viewed from before. In addition to the great deformity of the tibia, the fibula had undergone a displacement at its upper extremity. Its head had been forced away from its articulation with the tibia, and formed an unnatural prominence, above the usual position in reference to the tibia. The bearing of this bone was also altered. Not having been broken at the time of the accident, it could not yield and form an angle, as the tibia had at the seat of fracture; but maintaining its natural straight line, it had been compelled to alter its line of bearing, in compliance with the angular form of the larger bone. The fibula, therefore, preserved a line parallel to the lower portion of the tibia. Its lower end, being forcibly acted on by the inward inclination of the foot and lower part of the tibia, had carried the upper part outward; and had caused a dislocation of its head, which had undergone some change of form, and possessed a degree of motion not natural to it in its ordinary position. The shortening of the whole limb occasioned by this alteration in form, was such as to cause Captain Charlton to walk on his toes; the heel being raised an inch and a half when he stood upright. The soft parts had a healthy aspect; and the cicatrix over the bone had not contracted a firmer union to the periosteum than is usual with wounds situated directly over bone."

The limb was useless; the patient was obliged to carry it at some distance from its fellow in the act of progression. Sir Astley Cooper and Mr. Key were consulted as to the possibility of restoring the natural line of the bones of the leg; and the former suggested as the only means of restoration, that the bones of the leg should be divided—doubting whether the division of the tibia alone would be sufficient to set the fibula at liberty;—but that the tibia should be first divided; and if necessary, the operation should be performed on the fibula. As the muscles were not apparently in fault, this course promised the patient relief. They seemed to have acted only from the tibia having lost its support on its inner side, and consequently to have drawn the foot and the lower half of the leg inwards. Their fibres did not appear to have undergone any permanent shortening.

---

* We are indebted for the above abstract of these three cases to our colleague Dr. G. W. Norris.

The operation was performed by Mr. Key, on the 14th of October, 1838. "The tibia was laid bare on its anterior surface, by a longitudinal incision nearly four inches long, which traversed the line of the old wound, and allowed the integuments to be detached on each side; so that the anterior spine and the attachment of the soleus were exposed, just above the site of the old fracture. A strong steel grooved director, slightly curved, such as I use in operating for hernia, but narrow, was then passed along the outer surface of the tibia, detaching the tibialis anticus, until it reached the unyielding interosseous ligament. By a little firmer pressure, the director pierced it close to the bone. With another similar director, and by the same process, the inner and back surface of the tibia was so far detached from its muscles, that the ends of the two directors met behind the bone.

"A curved needle, on which was hooked a chain-saw, was then passed along the groove of the outer director, and from thence to the groove of the inner; and its point being brought to view by a pair of dressing-forceps, the saw was adjusted so as to cut the bone from behind. When the tibia was about half sawn through, the saw—as chain-saws too often do, even when lightly used—locked, and became useless: the section of the bone was therefore completed from before, by a small common saw.

"As soon as the tibia was divided, Sir Astley Cooper, taking the foot in his hand, found the lower part of the leg quite free to move in any direction, and that it was unnecessary to divide the fibula. As soon as the tibia was brought into a straight line, the head of the fibula was restored in some measure to its natural position, and ceased to project in the unseemly manner it had done before the operation. The part where the tibia was divided, gaped, as soon as the bones were straightened; and the point of contact between the sawn ends of the tibia was but a small portion of its outer circumference. The muscles had, from length of time, acquired so fixed a state, that some force was required to overcome their resistance: for as soon as the hand was removed from the foot, they immediately carried it inwards, to its former position.

"The limb was allowed to rest on pillows, without much restraint: it being thought advisable to allow the wound to pass into a healthy state of granulation, before any attempt was made to confine the bones with splints. At the end of about ten days the wound had quietly gone through its several stages, and had healed, with the exception of about an inch in the centre: this part continued more or less open for some weeks; discharging a healthy pus, and giving exit to a few minute portions of exfoliating bone. The inflammation that succeeded the operation, was less than might have been expected; and the constitutional disturbance was inconsiderable, owing, probably, to the natural temperament of the patient, and his long previous preparation. The suppuration seemed to be confined to the periosteum and ends of the bone; the surrounding soft parts remaining almost free from pain and tumefaction.

"The object to which it was necessary to pay close attention, during the progress of cicatrisation, was to counteract the resistance of the muscles, and to prevent contraction at the cicatrix when union had taken place.

"The limb, throughout the whole treatment, was kept upon the heel, with the knee straight. At first, two long lateral splints, well padded, were applied, so as to embrace the foot on each side: to these were added, afterwards, an under splint, to give more effective support and steadiness to the limb. The constant tendency to displacement, was not effectually prevented by common tapes and bandages: as these became slack, the leg assumed its former distorted position; and thus motion was given to the broken ends of the bone, in adjusting the line of the limb. To avoid this, which was not practicable by means of straps or bandages, a tourniquet was applied at either end of the splint. The length of lever enabled the upper tourniquet to act with great power on the foot, and to keep it in a straight line with the thigh. The lower one was kept firmly screwed to the heel of the two splints; thus keeping the foot firmly secured, and giving steadiness to the action of the upper tourniquet. This plan of keeping the tapes of the tourniquets tight prevented motion or displacement in the ends of the bones. It was at one time contemplated to substitute the white-of-egg bandage, in place of the splints; but the attempt was unsatisfactory, as displacement of the limb gradually took place; and we were compelled again to have recourse to the method which had answered our purpose so well, with the addition of a long outside pad on the fibula.

"The process of union and of consolidation, was necessarily tedious, from the limited points of contact between the sawn ends of the bone and the space which had to be filled up on its inner part. It was not till the beginning of January, that union could be said to have taken place; as before that time, the limb would slightly yield, when released from the splints. On the 18th of January, the wound having been some time closed, and the bone seeming to be firmly united, Sir Astley Cooper, in the presence of Mr. Atkins and Mr. Balderson, who had unremittingly watched the progress of the case, made a careful examination of the leg, and pronounced it to be united and firm. The fibula, though deviating but little from its usual appearance, had not become quite firm in its new position; the ligaments remaining weak, and unable to sustain it without allowing some slight lateral motion. It was deemed advisable, while the external callus was forming and acquiring firmness, to continue the splints with common bandages and fillets. This precaution was also rendered necessary, by the possibility of the newly-formed cartilage contracting before bone had been deposited in sufficient quantity to give it solidity. The length of the limb appeared little less than its fellow, when they were laid together parallel to one another."

On the 10th of March, 1839, the date of the last report, the leg continued in good position; but the cicatrisation of the wound had been retarded, by the coming away of several small portions of bone; in other respects, the patient was doing well.—ED.]

ARTICLE VIII. *Notice of the Scarlet Fever as it occurred in the Valley of Virginia and in the counties of Loudon and Fauquier in the year 1832; and of the Treatment which proved the most successful.* By H. D. MAGILL, M. D., of Virginia.

IN the year 1832, the scarlet fever made its appearance in the northern counties of the Valley of Virginia; and extended its ravages across the Blue Ridge mountains, into the contiguous counties of Loudon and Fauquier. It was attended with dreadful fatality.

The depleting plan of treatment was at first universally adopted in the Valley. In some instances, during this mode of treatment, the patient sunk